SERVED: May 22, 1992

NTSB Order No. EA-3562

UNITED STATES OF AMERICA NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD at its office in Washington, D.C. on the 30th day of April, 1992

BARRY LAMBERT HARRIS, Acting Administrator, Federal Aviation Administration,

Complainant,

SE-9945

v.

CLINTON J. ANDERSON,

Respondent.

OPINION AND ORDER

The Administrator has appealed from the oral initial decision of Administrative Law Judge Jerrell R. Davis, rendered at the conclusion of an evidentiary hearing on January 11, 1990. The law judge reversed an order of the Administrator charging respondent with violations of sections 43.13(a) and (b) of the Federal Aviation Regulations ("FAR," 14 C.F.R. Part 43) and imposing a 120-day suspension of respondent's airframe and powerplant (A & P) mechanic

¹An excerpt from the hearing transcript containing the initial decision is attached.

certificate.² The Administrator claimed that respondent did not utilize acceptable methods in the repair of four turbocharger wastegates intended for use in a Piper Aerostar 601P. In the law judge's estimation, however, the Administrator failed to establish the violations by a preponderance of the evidence.

The Administrator has filed a brief in which he argues that the law judge erred in finding that the allegations set forth in the complaint were not established.³

After consideration of the briefs of the parties and the record, the Board concludes that safety in air commerce or air transportation and the public interest require

²"§ 43.13 Performance rules (general).

⁽a) Each person performing maintenance, alteration, or preventive maintenance on an aircraft, engine, propeller, or appliance shall use the methods, techniques, and practices prescribed in the current manufacturer's maintenance manual or Instructions for Continued Airworthiness prepared by its manufacturer, or other methods, techniques, and practices acceptable to the Administrator, except as noted in § 43.16. He shall use the tools, equipment, and test apparatus necessary to assure completion of the work in accordance with accepted industry practices. If special equipment or test apparatus is recommended by the manufacturer involved, he must use that equipment or apparatus or its equivalent acceptable to the Administrator.

⁽b) Each person maintaining or altering, or performing preventive maintenance, shall do that work in such a manner and use materials of such a quality, that the condition of the aircraft, airframe, aircraft engine, propeller, or appliance worked on will be at least equal to its original or properly altered condition (with regard to aerodynamic function, structural strength, resistance to vibration and deterioration, and other qualities affecting airworthiness)."

³Respondent filed a reply brief opposing the Administrator's appeal.

affirmation of the Administrator's order in its entirety. Therefore, we reverse the law judge's decision.

The Administrator claims that respondent, the holder of an A & P mechanic certificate, improperly repaired the Piper Aerostar wastegates. The complaint specifically alleges that respondent

"did not utilize acceptable methods, techniques or practices and [the work] was not performed in a manner rendering the parts equal to their original or properly altered condition due to, inter alia:

- a. butterfly valves welded to activating shafts on all four waste gates,
- b. visible clearance gaps between the butterfly valve and housing while in the fully closed position,
- c. a binding shaft on one valve assembly,
- d. improper bushing application or excessive wear allowing unacceptable lateral movement of one valve shaft,
- e. no documentation as to the valves being tested to meet manufacturer's specifications."

The record establishes that in the summer of 1988, the owner of a Piper Aerostar brought the aircraft to a repair shop for an annual inspection. The mechanic, upon observing that the wastegates on the turbocharger were "coming apart and sticking," brought them to Main Turbo Systems for repair. Main indicated that it could not repair them, but could send them out to be fixed. The parts were then sent to respondent, who attempted to repair them.

In his appeal, the Administrator maintains that substantial evidence supports the allegations that respondent

violated FAR sections 43.13(a) and (b), as set forth in the complaint. We are inclined to agree. Under section 43.13(a), respondent was obliged to perform the maintenance in accord with the Piper manual or "other methods, techniques, and practices acceptable to the Administrator." If a manufacturer's maintenance manual is silent on a particular repair method, a respondent must obtain FAA approval before altering an aircraft part. See Administrator v. Fisher, 4 NTSB 1382 (1984).

Respondent contends that before he began the weld repairs, he contacted a local Piper representative and was told that replacement parts for the Aerostar wastegates were unavailable. He claims that he then consulted AC 43.13-1A and decided that welding the existing butterfly to the shaft was a viable option. The circular states that "[i]t is generally recommended that exhaust stacks, mufflers, tailpipes, etc., be replaced with new or reconditioned components rather than repaired." Id., ¶ 733 at 289.

Although the circular permits welding when necessary, it does not condone the fabrication of an unauthorized substitute. Respondent testified that he decided "to repair the part based on other waste gates that I have seen and based on what this waste gate looked like. And I did so by duplicating, as

⁴Respondent testified that before installing a part unauthorized by the aircraft manufacturer, he would have to obtain a field approval from the FAA. He assumed, however, that Main would seek the approval for the welded parts. Transcript at 215.

best I could, the pieces." Transcript at 188. Nonetheless, his efforts to discern the correct procedure for repairing the wastegates were insufficient. See Administrator v.

Robinson, 4 NTSB 994, 996 (1983)("The extent to which the proper tools, manuals and guidance may not have been immediately available to respondent ... does not excuse respondent's violation").

An FAA inspector testified that, although there were no manufacturer specifications published on repairing the wastegates, Piper Industries indicated to him, upon inquiry, that welding would defeat the whole purpose behind the wastegate design and was not an approved method of repair. Piper's method of affixing the butterfly to the shaft is by means of two pins, thus enabling the parts to be disassembled for cleaning. As a certified A & P mechanic, respondent was under an obligation to comply with approved repair methods and if he was unsure as to what those methods were, to ascertain the correct procedure from the manufacturer.

⁵In a letter to the FAA inspector dated 16 August 1988, Piper stated:

[&]quot;Piper has no way of repairing the wastegates other than the replacement of the worn out parts. Piper has never given any repair authorization other than direct parts replacement."

The company that ultimately repaired the wastegates learned by contacting Piper Industries directly that the only method approved by the manufacturer to repair the component parts of wastegates was replacement. Respondent could have discovered this same information.

Respondent argues that his method of welding the

After returning the parts to Main, respondent followed up with two letters stating that the repairs and installation of shafts and butterfly valves were "in compliance with FAR 43.13-1A using certified stainless steel materials." He signed the letters and included his A & P mechanic's certificate number. Through these letters, respondent indicated that the wastegates had been properly repaired in compliance with applicable standards. He now argues that, although he repaired the items, he did not intend to suggest that the parts could be immediately installed on the aircraft. He further asserts that it was Main's responsibility to test the parts and certify that they could safely be installed on the aircraft. We find no merit in

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butterfly to the shaft rendered the piece superior to those joined with pins. However, Piper's design was intended to facilitate cleaning. In addition, evidence presented at the hearing revealed that each wastegate, as repaired by respondent, had visible gaps between the closed butterfly valve and the housing. Once installed on an aircraft, this condition could result in exhaust leakage and thus diminish the effectiveness of the wastegates, in violation of FAR section 43.13(b).

⁸Although respondent wrote FAR 43.13-1A in his correspondence, it was determined at the hearing that he actually meant AC 43.13-1A.

Main painted the wastegates, then forwarded the parts and the letters to the first mechanic. According to this mechanic, he could not install the wastegates on the aircraft because they were completely unsatisfactory for their intended purpose. He was so incensed at the condition in which the parts were returned to him that he brought them to the local FAA office. An inspector took photos and commenced an investigation.

⁹Respondent claims that he was the wrong party to pursue in this matter. He intimates that the Administrator instead

this argument. Respondent was well aware that the wastegates were aircraft parts and would be used on an aircraft. As a person performing maintenance on aircraft components, he was responsible under FAR sections 43.13(a) and (b) for following correct procedure and returning the parts in their original or properly altered condition.¹⁰

ACCORDINGLY, IT IS ORDERED THAT:

- 1. The Administrator's appeal is granted;
- 2. The initial decision is reversed; and
- 3. The 120-day suspension of respondent's airframe and powerplant mechanic certificate shall begin 30 days after service of this order.¹¹

COUGHLIN, Acting Chairman, LAUBER, KOLSTAD, HART and HAMMERSCHMIDT, Members of the Board, concurred in the above opinion and order.

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should have imposed a sanction on Main. We acknowledge that there may have been a reason to seek enforcement action against Main, but this possibility does not excuse respondent's own lack of diligence in performing the assigned repairs.

¹⁰See Administrator v. Robinson, 4 NTSB 994 (1983), where a mechanic did not thoroughly consult the manufacturer's manual before effecting repairs. We quoted the law judge, who stated, "`[t]he great responsibility and confidence that is placed on and in an A & P mechanic, and the competence that the public has every reason to expect of him, must be upheld and enforced.'" <u>Id</u>. at 996.

¹¹For the purpose of this order, respondent must physically surrender his certificate to a representative of the Federal Aviation Administration pursuant to FAR § 61.19(f).